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### Indian Standard

# PEANUT CHIKKI (CANDY) — SPECIFICATION

(First Revision)

भारतीय मानक

मूँगफली की चिक्की (कंडी) - विशिष्टि

(पहला पुनरीक्षण)

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BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002

#### **FOREWORD**

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards on 2 June 1989, after the draft finalized by the Bakery and Confectionery Industry Sectional Committee had been approved by the Food and Agriculture Division Council.

CHIKKI is a favourite Indian sweetmeat. It is made chiefly from peanuts and from other materials, such as, cashewnuts, roasted gram dal, roasted sesame seeds, etc. In addition jaggery, raw KHAND-SARI sugar, crystalline sugar, liquid glucose, spices and flavouring essences are used in the preparation of CHIKKI.

This standard under the name of peanut candy was first published in 1975. In this revision, it was decided to rename the standard as peanut *CHIKKI* (candy) because it is popularly known by this name in the country. Microbiological requirement and limits for aflatoxin have been introduced in the standard. The committee considered covering *CHIKKI* made from other products but it was felt that at present the demand was only for a standard on peanut *CHIKKI* and *CHIKKI* from other material could be standardized at a later stage, depending on the demand.

While formulating this standard, necessary consideration has been given to the relevant Rules prescribed by the Government of India under the *Prevention of Food Adulteration Act*, 1954 and the *Standard of Weights and Measures* ( *Packaged Commodities* ) *Rules*, 1977. This standard is subject to restrictions imposed under these Acts, wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2: 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

### Indian Standard

## PEANUT CHIKKI (CANDY) — SPECIFICATION

## (First Revision)

#### 1 SCOPE

1.1 This standard prescribes the requirements and the methods of sampling and test for peanut CHIKKI (candy).

#### 2 REFERENCES

2.1 The Indian Standards listed in Annex A are necessary adjuncts to this standard.

#### 3 INGREDIENTS

3.0 The following materials may be used in the preparation of CHIKKI.

#### 3.1 Groundnuts ( Peanuts )

Hand-picked selected non-defatted kernels suitable for table use conforming to grades HPS Bold 1. HPS Bold 2, HPS Bold 3, HPS KHANDESH 1 and HPS KHANDESH 2 of IS 4427: 1967 shall be used. The kernels shall be free from foreign materials, namely, mud, stones, etc, including other non-edible oilseeds, such as, MAHUA, castor, argemone, NEEM. The groundnuts shall be cleaned of all lentils, germs, overburnt seeds, etc, after roasting and breaking. Groundnuts shall be fresh, of slightly sweet, pleasant taste, free from insects, rodent hair and excreta, fungal infection, bitter or rancid taste and odour.

#### 3.1.1 VANASPATI

Vanaspati used shall conform to IS 1063: 1986.

#### 3.1.2 Sugar

Refined sugar (IS 1151: 1969), vacuum pan sugar of appropriate column and size grade (IS 498: 1985) or *DESI* sugar (*KHANDSARI*) shall be used.

#### 3.1.3 Jaggery

**3.1.4** Liquid Glucose — ( IS 873: 1974).

#### **3.1.5** *Spices*

- a) Cinnamon (IS 4811: 1968)
- b) Cardamom (IS 1907: 1984)
- c) Cloves (IS 4404: 1975)
- d) Nutmeg (Myristic fragrans).

#### **4 REQUIREMENTS**

#### 4.1 Description

Peanut CHIKKI (candy) shall be of uniform light caramel colour, well set, crisp, of pleasant taste and having a uniform distribution of ingredients, whole or comminuted. It shall not show signs of etickiness or have any objectionable flavour or odour. The CHIKKI shall be free from preparing defects such as, signs of scorching, burning or undercooking or defects attributable to poor quality preparation, free from grittiness and poor aroma associated with low grade ingredients. The CHIKKI shall be in any desired size and shape and shall be free from extraneous impurities and harmful ingredients.

- **4.2** The material shall not contain any added colours and flavouring agents other than those covered under the provisions of the *Prevention of Food Adulteration Act*, 1954 and the Rules framed thereunder.
- **4.3** The *CHIKKI* shall be manufactured under hygienic conditions specified in IS 2491: 1972.
- **4.4** Peanut content when determined according to the method given in Annex B shall not be less than 50 percent by mass.
- **4.5** The material shall also meet the requirements specified in Table 1.

#### **5 PACKING AND MARKING**

#### 5.1 Packing

Peanut CHIKKI (candy) shall be wrapped in cellulose film, aluminium foil, wax paper, polyethylene/polypropylene or other flexible packaging materials/laminates and shall be heat sealed. Wrapped CHIKKI shall be further packed in suitable containers which are clean and sound and shall provide adequate protection against moisture.

**5.1.1** Peanut *CHIKKI* (candy) shall be packed in 50g pack or in multiples thereof.

#### 5.2 Marking

The following particulars shall be clearly and indelibly marked on the label:

a) Name or trade name;

Table 1 Requirement for CHIKKI

(Clauses 4.5, 7.1 and 8.2)

Sl No.	Characteristic	Requirement	Method of Test, Ref to	
110.			Clause of IS 6287: 1985	Other Standards
(1)	(2)	(3)	(4)	(5)
i)	Moisture, percent by mass, Max	5.0	5	_
ii)	Protein, percent by mass (on dry basis), Min	12	11	سيدن
iii)	Fat, percent by mass (on dry basis), Min	12	10	
iv)	Acid value of extracted fat (on dry basis), Max	2	_	Clause 7 of IS 548 (Part 1): 1964
v)	Acid insoluble ash (on dry basis), percent by mass Max	0.1	7	_
vi)	Total sugars as sucrose, percent by mass, Max	40	9	-
vii)	Total bacterial count per g, Max	5 000		IS 5402: 1969
viii)	Yeast and molds per g, Max	10	-	IS 5403: 1963
ix)	Pathogens ( Staphylococcus and Salmonella on 25 g sample )	Nil	_	IS 5887 ( Parts 2 and 3 ) : 1976
x)	E Coli	Absent (in 1 g)	_	IS 5887 ( Part I ) : 1976
xi)	Coliform	Absent (in 1 g)		IS 5401 : 1969
xii)	Aflatoxin μg/kg, Max	15		Appendix J of IS 4684: 1975

- b) Name of the manufacturer;
- c) Batch or code number:
- d) Net mass in g or kg;
- e) Proportion of ingredients used;
- f) Date of manufacture;
- g) The statement 'Permitted flavouring and colouring agents used', if used; and
- h) Any other details required under the Standards of Weights and Measures ( Packaged Commodities ) Rules, 1977/PFA Rules.

#### 6 SAMPLING

6.1 Representative samples for the material shall be drawn and conformity of the material to the requirements of this specification shall be determined by the method prescribed in 3 of IS 6287: 1985.

#### 7 TESTS

7.1 Tests shall be carried out as prescribed in 4.1, 4.4 and in col 4 and 5 of Table 1.

#### 7.1.1 Quality of Reagents

Unless specified otherwise, pure chemicals and distilled water shall be employed in the tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the result of analysis.

#### 8 PREPARATION OF MATERIAL FOR TESTS

- 8.1 Grind in a dry pestle and mortar, 150 g of sample thoroughly to secure a uniform sample. Store the ground sample immediately in an airnight glass container and use this for tests.
- 8.2 Fat extracted as in item (iii) of Table 1 should be taken for determination of acid value.

#### ANNEX A

( Clause 2.1 )

IS No.

Title

IS No.

Title

IS 548 (Part 1): Methods of sampling and test for oils and fats: Part 1 Sampling, physical and chemical tests (revised)

IS No.	Title	IS No.	Title	
IS 873: 1974	Specification for liquid glucose (first revision)	IS 5403: 1963	Method for yeast and mould count in foodstuff	
IS 1151: 1969	Specification for refined sugar (first revision)			
IS 1907: 1984	Specification for cardamom (capsules and seeds) (second revision)		poisoning: Part 1 Isolation, identification and numeration of Escherichia coli (first revision)	
IS 2491:1972	Code for hygienic conditions for food processing units (first revision)	IS 5887 (Part 2): 1976	Methods for detection of bacteria responsible for food	
IS 4404: 1975	Specification for cloves, whole and ground (first revision)		poisoning: Part 2 Isolation, identification and enumeration of Staphylococcus aureus and faecal streptococci (first revision)	
IS 4427 : 1967	Specification for grading for groundnut kernels for oil milling and for table use			
IS 4684 : 1975	Specification for edible ground- nut flour (expeller pressed) (first revision)		Methods for detection of bacteria responsible for food poisoning: Part 3 Isolation, identification of Salmonella	
IS 4811: 1968	Specification for cinnamon, whole		and Shigella (first revision)	
IS 5401:1969	Methods for detection and estimation of coliform bacteria in foodstuffs	IS 6287 : 1985	Methods of sampling and analysis of sugar confectionery (first revision)	
IS 5402: 1969	Method for plate count of bacteria in foodstuffs	IS 10633: 1986	Specification for VANASPATI (first revision)	

#### ANNEX B

( Clause 4.4 )

#### **DETERMINATION OF PEANUT CONTENT**

#### **B-1 PROCEDURE**

B-1.1 Accurately weigh 100 g of the material and dip in warm water (60°C) in a dish. Allow the sugar or jaggery to dissolve Decant the syrup and separate peanuts (whole as well as broken

kernels) and wash them with warm water to remove traces of sugar syrup. Press the peanuts between folds of filter paper and heat at 100°C for 5 hours. Determine the weight of dry kernels and calculate their percentage on dry mass basis.

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#### **Amendments Issued Since Publication**

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